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## DEPARTMENT OF NATURAL RESOURCES

John Hannah Building, P.O. Box 30241, Lansing, MI 48909

ROLAND HARMES, Director

US EPA RECORDS CENTER REGION 5



1004962

May 13, 1994

Mr. Tien Pham  
Dynecol, Inc.  
6520 Georgia Street  
Detroit, Michigan 48211

MAY 21 1994

Dear Mr. Pham:

SUBJECT: Dynecol 5/2/94 Environmental Monitoring Report  
(MID 074 259 565)

The Michigan Department of Natural Resources (MDNR), Waste Management Division (WMD), has completed a review of Dynecol's monthly environmental monitoring report dated May 2, 1994. Based upon that review, WMD staff noted the following problems with the first quarter groundwater monitoring report that was included in the submittal:

1. On the field data entry form for monitor well B-2, the section entitled "Static Water Level Measurement" states that the well was dry. Yet in the "Purge" section on that same form, a water elevation and a purge volume is noted. This information is inconsistent and should be corrected and/or clarified. In addition, the field data entry form shows that Dynecol did not collect groundwater samples from this well. For future reference, if water is present in the well, but it is purged to dryness, Dynecol should return to the well later in the day to determine if the well has recharged sufficiently to collect samples. If it has not recharged sufficiently by the end of the day, then this fact should be noted along with the comment that samples could not be collected.
2. A review of the groundwater quality data for well B-3 shows that the well may be experiencing signs of grout contamination. During the March sampling, this well exhibited a high pH (11.6) and elevated levels of sodium, calcium, specific conductivity, and carbonate alkalinity. These same conditions were identified in the past in monitor well B-1. Well B-1 was determined to be grout contaminated and has since been abandoned. Because of the elevated pH detected in well B-3, Dynecol sampled the well again in April 1994. Results from the April sampling revealed that the pH had returned to normal levels (in the range of 8.00). Well B-3 has exhibited this same problem on a couple of samplings that were conducted in the past. Given the fact that the pH of the well water returns to normal during the

second sampling, it appears that with additional well pumping, the grout contamination problem may be eliminated. To avoid this problem in the future, WMD recommends that you try to purge an additional volume of water from the well prior to sample collection. During the purging process, the company should pump at least three (3) volumes of water from the well casing and then continuously monitor pH/specific conductance to determine when these parameters stabilize. Once these parameters have stabilized, samples can then be collected. If the grout contamination problem cannot be eliminated, Dynecol may need to replace monitor well B-3.

3. When examining the field data entry sheets, WMD noted that Dynecol does not measure the depth of their monitor wells each time they take static water levels. As a check to make sure that silt has not accumulated in the well screen and that there are no obstructions in the well casing, the company should verify the depth of the wells during each sampling.
4. When evaluating the water quality data for well B-4, WMD noticed that carbonate alkalinity in the well was reported at a level of 80 ppm. Since the pH for the well was reported to be 8.8, this carbonate level appears to be quite high. Please contact your laboratory and have them check their records to verify that the carbonate value that they have reported is accurate. The laboratory has made errors when reporting this value in the past. If this level of carbonate is determined to be correct, WMD recommends that you follow the purging procedures described above for well B-3. Elevated levels of carbonate in the water samples may indicate the beginning signs of grout contamination in the well.

If you have any questions, please contact me.

Sincerely,



Virginia Loselle  
Environmental Quality Specialist  
Hazardous Waste Program Section  
Waste Management Division  
517-373-7974

cc: ✓ Ms. De Montgomery, DNR/U.S. EPA Reporting  
Dr. Ben Okwumabua, DNR-Livonia  
Ms. Cheryl Howe, DNR  
HWP/C&E File

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

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WMD RECORD CENTER

JUN 24 1994

January 11, 1994

TO: Ben Okwumabua, Supv., Livonia District Office, WMD  
Cheryl Howe, Engineer, H.W. Program Section, WMD  
Ken Burda, Section Chief, H.W. Program Section, WMD

FROM: Ginny Loselle, H.W. Technical Support Unit, WMD

SUBJECT: Dynecol Operating License (MID 074 259 565)

*Ginny Loselle*

Dynecol has submitted the enclosed modifications to the groundwater monitoring program and the statistical evaluation method contained in their Act 64 operating license. Dynecol modified their groundwater monitoring program because several of the well locations identified in their license were incapable of yielding enough water for sampling. WMD approved a work plan whereupon Dynecol performed field work to upgrade their monitoring system. The enclosed modifications reflect the approved changes that were made to Dynecol's groundwater monitoring program.

During the first sampling where statistics were applied to Dynecol's groundwater monitoring data, the company identified a statistical increase over background in some of their chemical monitoring parameters. After a thorough review of the statistical technique contained in their operating license, it was determined that the technique the company was using was overly conservative. As a result, Dynecol requested an amendment to the statistical evaluation method contained in their operating license. Dynecol submitted the enclosed amendment to their statistical monitoring program and it was approved by WMD.

Please place the enclosed changes in the appropriate sections of your copy of Dynecol's operating license. Since we have not formally modified the company's operating license, you will need to keep the originals along with these modifications. Dynecol's operating license is due for renewal in the very near future and it is my understanding that the license will be formally changed at that time.

cc: Ms. De Montgomery, DNR/U.S. EPA Reporting  
HWP/C&E File

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DEPARTMENT OF NATURAL RESOURCES

John Hannah Building, P.O. Box 30241, Lansing, MI 48909

ROLAND HARMES, Director

December 27, 1993

Mr. Tien Pham  
Dynecol, Inc.  
6520 Georgia Street  
Detroit, Michigan 48211

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WMD RECORD CENTER

JUN 24 1994

Dear Mr. Pham:

SUBJECT: December 3, 1993 Groundwater Monitoring Program Report  
Dynecol, Inc. (MID 074 259 565)

The Michigan Department of Natural Resources (MDNR), Waste Management Division (WMD), has reviewed your December 3, 1993 groundwater monitoring program improvement report for the Dynecol facility in Detroit, Michigan. Based upon our review of the information submitted, Dynecol has satisfactorily completed the hydrogeological work required by WMD to upgrade their groundwater monitoring program. There was no groundwater encountered in any of the boreholes that were drilled, therefore, the company was unable to install monitoring wells at any of the locations that were investigated as part of the study.

Now that Dynecol has completed the work required by WMD to update their groundwater monitoring program, the company needs to modify the Sampling and Analysis Plan (SAP) contained in their Act 64 hazardous waste operating license. The plan needs to be updated to reflect the revised locations that will be sampled as part of the company's monitoring program and the new statistical technique that the company will be using to evaluate their groundwater monitoring data. Please revise the SAP and submit it to our office by no later than February 15, 1994. Once approved by WMD, this will be the plan that Dynecol must comply with during future samplings.

The WMD acknowledges that there are some minor modifications that will need to be made to the language in the Environmental Monitoring Section (Part V) of Dynecol's Act 64 operating license as a result of the changes in the company's monitoring program. Because the monitoring wells at the Dynecol facility are installed in isolated pockets of groundwater rather than in one continuous aquifer, the company will not be able to provide a groundwater contour map identifying the rate and the direction of groundwater flow beneath the site. Since the company's license will be coming up for renewal in the near future, WMD plans to address these language changes at the time of renewal.


Mr. Tien Pham

-2-

December 27, 1993

Should you have any questions, please contact me.

Sincerely,



Virginia L. Loselle  
Environmental Quality Specialist  
Hazardous Waste Program Section  
Waste Management Division  
517-373-7974

cc: ✓ Ms. De Montgomery, DNR/U.S. EPA Reporting  
Dr. Ben Okwumabua, DNR-Livonia  
Ms. Cheryl Howe, DNR  
G.W. Monitoring File

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ROLAND HARMES, Director

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November 3, 1993

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WMD RECORD CENTER

JUN 24 1994

Mr. Tien Pham  
Manager of Technical Services  
Dynecol, Inc.  
6520 Georgia Street  
Detroit, Michigan 48211

Dear Mr. Pham:

SUBJECT: Third Quarter Groundwater Report, Dynecol, Inc.; MID 074 259 565

Staff from the Michigan Department of Natural Resources, Waste Management Division, have reviewed the groundwater monitoring data that you submitted as part of your October 25, 1993 monthly environmental report. A review of the data shows that you reported a higher than normal concentration of carbonate alkalinity in monitoring well B-3.

Please contact the analytical laboratory who did your chemical testing to verify if the carbonate alkalinity value you reported, namely 360 mg/l, is correct. For groundwater with a pH less than 9, alkalinity in the water generally is in the form of bicarbonate alkalinity. Carbonate alkalinity should not be present in the groundwater sample. If carbonate alkalinity in the groundwater from monitoring well B-3 rises above the level of detection, this may be a sign that the well has become contaminated with grout. If this occurs, the pH values in the well will rise and the concentration of bicarbonate alkalinity in the groundwater will decrease. If you cannot verify that the laboratory made an error when reporting the concentration of carbonate alkalinity in monitoring well B-3, you need to evaluate the well for further signs of grout contamination. If the well becomes grout contaminated, you will need to replace it with a properly functioning well so that representative groundwater quality samples can be obtained from this location.

Please contact our office by no later than December 10, 1993, with your findings on this matter.

Sincerely,

Virginia L. Loselle  
Environmental Quality Specialist  
Waste Management Division  
517-373-7974

cc: ✓ Ms. De Montgomery, DNR/U.S. EPA Reporting  
Dr. Ben Okwumabua, DNR-Livonia  
Ms. Cheryl Howe, DNR  
G.W. Monitoring File



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DEPARTMENT OF NATURAL RESOURCES

John Hannah Building, P.O. Box 30241, Lansing, MI 48909

ROLAND HARMES, Director

October 11, 1993

Mr. Tien H. Pham  
Manager, Technical Services  
Dynecol, Inc.  
6520 Georgia Street  
Detroit, Michigan 48211

43.1

Dear Mr. Pham:

SUBJECT: Revised Statistical Evaluation Proposal  
Dynecol, Inc. (MID 074 259 565)

The Michigan Department of Natural Resources (DNR), Waste Management Division (WMD), has reviewed your September 27, 1993, revised statistical evaluation proposal for the groundwater monitoring program at Dynecol, Inc. You submitted the revisions in response to our comments on your August 1993 letter requesting approval to modify the statistical evaluation procedures in Dynecol Inc.'s Act 64 operating license. With the following exception, the WMD hereby approves the statistical monitoring procedures you propose in your September 1993 proposal.


In the proposal, you state that the background samplings for well B-2 included only four sets of data. As such, you propose to use a tolerance factor of 5.145 to calculate the upper confidence limit for that monitoring well. In the U.S. EPA document entitled "Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities--Interim Final Guidance," the U.S. EPA recommends that you use eight or more samples to construct tolerance intervals. Since you do not have the recommended number of samples, the WMD recommends that you defer statistically evaluating well B-2 until you have at least eight sets of samples to perform your calculations. In the interim, you only need to report the chemical results that you receive for well B-2. Once you have collected eight sets of data from well B-2, you should use the upper confidence limit that you calculate from these samplings until you have collected a full set of sixteen samples from the well. Once sixteen sets of data have been collected from well B-2, the tolerance interval in well B-2 should be recalculated to be consistent with the rest of your program.

October 11, 1993

On October 7, 1993, the WMD sent a letter to Dynecol, Inc. approving the company's plan to upgrade their groundwater monitoring program. New monitoring wells may be installed at the facility as part of this work. The above discussed approach for constructing upper confidence limits should be used for any new wells that are installed at the facility. Once Dynecol, Inc. has completed the work that they need to do to upgrade their groundwater monitoring program, the WMD will need to develop an amendment to the company's Act 64 operating license to incorporate changes in the company's environmental monitoring program.

Should you have any questions, please contact Ms. Virginia Loselle of the Geotechnical Support Unit at telephone number 517-373-7974.

Sincerely,

  
Kenneth J. Burda, Chief  
Hazardous Waste Permits Section  
Waste Management Division  
517-373-0530

cc: Mr. Jim Sygo, DNR  
✓ Ms. De Montgomery, DNR/U.S. EPA Reporting  
Dr. Ben Okwumabua, DNR-Livonia  
Ms. Virginia Loselle, DNR  
Ms. Cheryl Howe, DNR  
HWP/C&E File  
GW Monitoring File



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DEPARTMENT OF NATURAL RESOURCES

John Hannah Building, P.O. Box 30241, Lansing, MI 48908

ROLAND HARMES, Director

October 7, 1993

Mr. Tien Pham  
Dynecol, Inc.  
6520 Georgia Street  
Detroit, Michigan 48211

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JUN 24 1994

Dear Mr. Pham:

SUBJECT: Revised Groundwater Monitoring Plan  
Dynecol, Inc. (MID 074 259 565)

The Michigan Department of Natural Resources (MDNR), Waste Management Division (WMD), has completed our review of your September 30, 1993 revised groundwater work plan. The plan outlines the steps your company is proposing to take to upgrade the groundwater monitoring program at the Dynecol facility. The revised plan was submitted to our office in response to comments we provided to the company on the June 1993 groundwater monitoring plan prepared by WW Engineering and Science (WWE&S). Based upon our review, WMD feels that the revised work plan is acceptable. Dynecol must provide our office with a schedule outlining when the company plans to perform the work by no later than October 15, 1993.

In response to comments provided by WWE&S in their cover letter that accompanied the plan, please note the following. If Dynecol satisfactorily completes the work outlined in the plan, and implements the program in accordance with the conditions contained in their Act 64 operating license, the company will be in compliance with applicable regulatory requirements. The WMD realizes that, if insufficient water is present in the shallow surficial fill, the new groundwater monitoring wells may not be able to be installed in this zone. If the new wells are screened in deeper sand lenses that are not interconnected with the surficial fill, we realize that it may be impossible to draw a groundwater contour map showing direction of groundwater flow. Note that static water levels measured in the shallow groundwater wells that currently exist at the facility have shown no correlation in the past. Because this was the case, the WMD required Dynecol to space their wells equally around the facility rather than locating them along a predominant direction of groundwater flow. The new wells that are to be installed do not deviate from this requirement. Once the new wells are installed and Dynecol obtains new information

Mr. Tien Pham

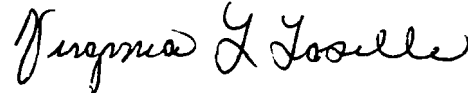
-2-

October 7, 1993

regarding groundwater flow conditions, the company's permit may need to be modified to reflect the fact that the facility cannot provide a groundwater contour map.

Should you have any questions, please contact me.

Sincerely,



Virginia L. Loselle  
Environmental Quality Specialist  
Hazardous Waste Permits Section  
Waste Management Division  
517-373-7974

cc: ✓ Ms. De Montgomery, DNR/U.S. EPA Reporting  
Dr. Ben Okwumabua, DNR-Livonia  
Ms. Cheryl Howe, DNR  
HWP/C&E File  
GW Monitoring File



JOHN ENGLER, Governor

## DEPARTMENT OF NATURAL RESOURCES

John Hannah Building, P. O. Box 30241, Lansing, MI 48909

ROLAND HARMES, Director

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WMD RCRA  
OCT 14 1993  
RECORD CENTER

August 31, 1993

Mr. Tien Pham  
Dynecol, Inc.  
6520 Georgia Street  
Detroit, Michigan 48211

Dear Mr. Pham:

This letter is in response to your August 6, 1993 letter notifying the Michigan Department of Natural Resources (DNR), Waste Management Division (WMD), that Dynecol confirmed a statistically significant increase in nickel in groundwater monitoring well B-4 at their Detroit facility. In the letter, you state that the statistical increase in nickel appears to have resulted from sampling/analytical errors and the statistical procedure the company uses to evaluate impacts from the hazardous waste units. In order to correct for this problem, you have made an application to the DNR to change the statistical procedure you use to evaluate your groundwater quality data. Staff from the WMD have reviewed your proposal and have the following comments:

1. Your letter states that you will calculate prediction levels to evaluate groundwater contamination in accordance with the DNR's April 30, 1987 draft guidance for Act 64/RCRA clean closure. The DNR document referenced applies to soil cleanups, not to groundwater quality evaluations. In addition, the 1987 draft DNR guidance is outdated. It has been revised several times since 1987.

The document that you should use as a guide to develop a statistical technique for evaluating your groundwater monitoring data was published by the U.S. EPA in April, 1989, and updated in 1992. It is entitled "Statistical Analysis of Ground Water Monitoring Data at RCRA Facilities". Copies of these guidances are enclosed. In these EPA documents there is a statistical approach, called the tolerance interval method, that is similar to the technique you have proposed. The tolerance interval method calculates an upper confidence limit for chemical

compounds based upon the mean of your background data and the standard deviation times a tolerance factor (K). The value for K is dependent upon the number of samplings that make up your background and it is obtained from a standard table that lists which value to use. For background samplings which include 16 sets of data, calculated at the 95% confidence level and with 95% coverage,  $K = 2.523$ . For all parameters except pH, the test is one-sided and calculates an upper confidence limit value that cannot be exceeded. In the case of pH, both upper and lower confidence levels are calculated and used to evaluate groundwater impacts.

2. In your proposal, you state that if you detect a primary monitoring parameter above its calculated tolerance limit, you will re-sample the specified parameter in duplicate within thirty days. Your proposal for confirmation sampling is not acceptable. If you detect a statistically significant increase in a primary monitoring parameter, you must immediately re-sample the monitoring location for the parameter in question and you must collect at least 4 independent replicate groundwater samples from the well (see "Section 3" in the April 1989 EPA guidance).
3. If Dynecol confirms a statistically significant increase in any of their primary monitoring parameters, the company must report the increase to WMD as per the reporting requirements contained in their operating license. In addition, the company must conduct a re-sampling and corrective action program consistent with the groundwater monitoring requirements specified in their operating license.

Please revise your statistical evaluation proposal as per the comments listed above. Your new submittal must be submitted to the WMD by no later than September 30, 1993. Since your new statistical monitoring evaluation technique will replace the procedure specified in your current operating license, issued pursuant to the Hazardous Waste Management Act, 1979 PA 64, as amended, your submittal must be in a format which can be readily inserted into your license. Once approved, the new statistical procedure will become the one you will use during all subsequent monitorings.

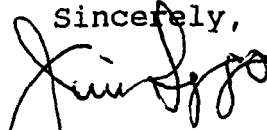
Mr. Tien Pham

-3-

August 31, 1993

Should you have any questions, please contact Ms. Virginia Loselle at Waste Management Division, Department of Natural Resources, P.O. Box 30241, Lansing, Michigan, 48909, or at telephone number 517-373-7974.

Sincerely,



Jim Sygo, Chief  
Waste Management Division  
517-373-9523

Enclosures

cc: ✓ Ms. De. Montgomery, DNR/U.S. EPA Reporting  
Dr. Ben Okwumabua/Mr. Kurt Childs, DNR-Livonia  
Ms. Cheryl Howe, DNR  
Ms. Virginia Loselle, DNR  
HWP/C&E File

MICHIGAN DEPARTMENT OF NATURAL RESOURCES  
WASTE MANAGEMENT DIVISION  
STAFF REPORT

Complaint Inspection:  
Compliance Inspection:  
Construction/Closure Inspection:  
Permitting Inspection:  
PEAS Inspection:

PCB Report/Complaint:  
Sampling Inspection:  
Telephone Call: X  
Meeting Notes:  
Other:

Act 64: X  
Act 136:

Act 641:  
HWSA:

Act 245:  
RCRA:

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Date: 8/31/93 Time: 13:00  
Staff: Ginny Loselle

Company: Dynecol, Inc.  
Address: 6520 Georgia Street  
Participants: Tien Pham

MID: 074-259-565

Summary: Mr. Tien Pham phoned to notify me that Dynecol detected a significant increase in barium and arsenic from monitoring well B-3 and a significant increase in barium from monitoring well B-4 during their 2nd quarter well sampling. Dynecol plans to resample the wells during the week of September 6, 1993 to verify the increase. It should be noted that Dynecol has filed an application with the DNR to change the statistical procedure they use to determine statistically significant increases in the groundwater. DNR sent a letter to the company on August 25, 1993 and advised them that they need to change the alternative method they proposed. The statistically significant increases that the company noted during their 2nd quarter sampling were detected using the statistical method that Dynecol is proposing to change. The company is proposing to change their current statistical method because they feel that it is too conservative and, as such, results in an excessive number of false positives.

cc: Ms. De Montgomery, DNR/U.S. EPA Reporting  
Dr. Ben Okwumabua, DNR-Livonia  
Ms. Cheryl Howe, DNR

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## DEPARTMENT OF NATURAL RESOURCES

John Hannah Building, P.O. Box 30241, Lansing, MI 48909

ROLAND HARMES, Director

August 10, 1993

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OCT 14 1993  
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Mr. Tien Pham  
Dynecol, Inc.  
6520 Georgia Street  
Detroit, Michigan 48211

Dear Mr. Pham:

SUBJECT: 6/17/93 Letter Regarding Plan to Upgrade  
Groundwater Monitoring Wells; Dynecol, Inc.  
(MID 074 259 565)

This office has reviewed your request to relax the 40 foot depth the Department of Natural Resources (DNR) recommended as the maximum depth for drilling during installation of your new groundwater monitoring wells. Your request is denied. We agree with your consultants (WWES) that the purpose of the groundwater monitoring program is for release detection. That is why staff requested that you install the groundwater monitoring wells in the upper fill material if it is capable of yielding adequate water for sampling. Forty feet was recommended as the maximum depth for drilling in the event that groundwater is not encountered in sufficient quantity closer to the ground surface. The DNR selected 40 feet as the maximum depth for drilling based upon information from soil borings at the site showing silts and sands interbedded in the clay down to that depth.

WWES states that the DNR's recommended maximum 40 foot depth is excessive when installing release detection monitoring wells at this facility. They conclude that given the permeability of the lacustrine clay at the site, it would take in excess of 900 years for contaminants to travel down to the 40 foot depth. Your consultants calculations assume that the clay beneath your facility has a homogeneous thickness, that there will be no head build-up to force contaminants into the aquifer, and that the clay contains no fractures or more permeable lenses of material that would increase the rate of travel. Soil borings at the facility show that although the site is predominantly underlain by clay, the clay does contain lenses of permeable material down to depths of 40 feet and that these lenses are variable in thickness. WWES suggests that the DNR did not consider the fact that contaminants will be adsorbed on to soil particles thereby decreasing travel time even further. They neglect to mention that the degree to which contaminants will adsorb on

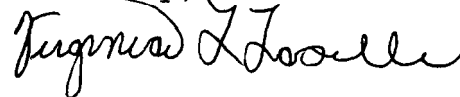
to the soil is a function of contaminant chemistry and pH conditions.

WWES suggests that dry wells placed in the surficial fill provide a better release detection monitoring system than a deeper well installed in saturated soils. Staff disagree. Dynecol currently has groundwater monitoring wells at the facility that are dry. The work that the DNR is requiring Dynecol to do is needed because the DNR feels that the company does not have an adequate groundwater monitoring program. Unless your consultants are suggesting installation of a suitably designed leak detection system in the unsaturated zone, it is unlikely that contamination could be detected by placing a few dry wells around the periphery of the site. In order for dry wells to be suitably located for leak detection monitoring, you would need to drill additional borings to fully characterize the topography of the clay underlying the surficial fill soils. In addition, installation of lysimeters (as opposed to wells) would be more suitable for sample collection.

In conclusion, the DNR feels that it is not unreasonable to require Dynecol to drill down to a maximum depth of 40 feet if sufficient groundwater is not encountered in the upper portion of the soil boring. If Dynecol finds that a well capable of providing groundwater samples cannot be installed within that 40 foot depth, they need not install a well at that location.

Should you have any questions, please contact me.

Sincerely,



Virginia L. Loselle  
Environmental Quality Specialist  
Hazardous Waste Permits Section  
Waste Management Division  
517-373-7974

cc: ✓ Ms. De Montgomery, DNR/U.S. EPA Reporting  
Dr. Ben Okwumabua/Mr. Kurt Childs, DNR-Livonia  
Ms. Cheryl Howe, DNR  
Monitoring Data File  
HWP/C&E File



MICHIGAN DEPARTMENT OF NATURAL RESOURCES  
WASTE MANAGEMENT DIVISION  
STAFF REPORT

Complaint Inspection:  
Compliance Inspection:  
Construction/Closure Inspection:  
Permitting Inspection:  
PEAS Inspection:

PCB Report/Complaint:  
Sampling Inspection:  
Telephone Call: X  
Meeting Notes:  
Other:

Act 64: X  
Act 136:

Act 641:  
HWSA:

Act 245:  
RCRA:

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Date: 7/21/93 Time: 14:00  
Staff: Ginny Loselle

Company: Dynecol, Inc.  
Address: 6520 Georgia Street Detroit, Mi.  
Participants: Tien Pham

MID: 074-259-565

Summary: Tien Pham phoned to provide verbal results from the well resampling that they did to confirm whether or not contaminants were detected in wells B-3 and B-4. The company's first quarter monitor results showed a decrease in pH in well B-3 and an increase in nickel in wells B-3 and B-4. The company resampled wells B-3 and B-4 in triplicate and used these results along with the original result to statistically confirm whether contamination is present in the wells. The new sampling results showed that pH and nickel in well B-3 were within background. The analysis for well B-4 revealed the presence of nickel just above detection in the groundwater. Because the results were so close to the detection limit, Dynecol collected an additional round of confirmational samples from well B-4. The analytical results from well B-4 will be available within 10-15 days and Tien will phone me with the data.

Tien asked if I had reviewed the 6/17/93 letter from WWES asking the DNR to reconsider their request for the company to drill down to a depth of at least 40 feet if a saturated zone is not encountered in the upper portion of the borehole. I said that I stand by my request to drill down to a depth of 40 feet in the event that a well cannot be installed at a higher elevation in the borehole. WWES's request to install a well in the shallow fill material even though water may not be present for sampling is unacceptable. The company has dry wells at the present time.

The purpose for upgrading the wells is to install wells capable of yielding enough water for sampling. I told Tien that I would respond to WWES's letter by the end of next week.

cc. Ms. De Montgomery, DNR/US EPA Reporting  
Dr. Ben Okwumabua/Mr. Kurt Childs, DNR-Livonia  
Ms. Cheryl Howe  
GW Monitoring File

*Compliance*

NATURAL RESOURCES

COMMISSION

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MES P. HILL  
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DEPARTMENT OF NATURAL RESOURCES

John Hannah Building, P.O. Box 30241, Lansing, MI 48909  
ROLAND HARMES, Director

RECEIVED MAR 5 1993  
WMD RCRA  
RECORD CENTER

January 28, 1993

Mr. Tien Pham  
Dynecol, Inc.  
6620 Georgia Street  
Detroit, MI 48213

Dear Mr. Pham:

SUBJECT: Act 64 Permit Annual Groundwater Report  
MID 074 259 565

Your facility is permitted under Michigan Act 64, P.A. 1979, as amended. The permit requires that your facility submit an annual groundwater report by March 1 of each year. To date, this office has not received your report. Please send three copies of the report to:

Geotechnical Support Unit  
Waste Management Division  
Michigan Department of Natural Resources  
P.O. Box 30241  
Lansing, Michigan 48909

If there are any questions, please contact me. Response to this notification is due by March 1, 1993.

Sincerely,

*E. Bennett*

Elaine Bennett  
Geotechnical Support Unit  
Waste Management Division  
517-373-8028

cc: De Montgomery/U.S. EPA  
Livonia District Office  
HWP/C&E File

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

*Compliance file*

January 9, 1992

TO: Kurt Childs, Waste Management Division  
Livonia District Office

FROM: Virginia Loselle, Geotechnical Unit  
Hazardous Waste Permits Section  
Waste Management Division

SUBJECT: Groundwater Monitoring  
Dynecol Inc., MID 074 259 565

I have completed an evaluation of Dynecol Inc.'s July, 1991 and September 1991 groundwater monitoring data submitted to the DNR. The July data, contained in a report from Tien H. Pham dated October 7, 1991, included groundwater monitoring results from Wells B-1, B-2, B-3, and B-5. The September data, contained in a report dated November 7, 1991, included groundwater monitoring results from Wells B-3 and B-5. In order to help compare Dynecol Inc.'s recent groundwater sampling results with those from previous samplings, I have compiled a chart (attached) which lists samplings which have occurred at the site, the parameters sampled on those occasions, and the laboratory results for those samplings. The chart is divided into sampling results for each of Dynecol's five groundwater monitoring wells, B-1 through B-5. As part of my evaluation, I compared the groundwater monitoring performed at the site with requirements contained in the company's May 2, 1990, Act 64 Operating License. The company's environmental monitoring requirements are contained in Attachment 14 of their operating license.

Based upon my review of Dynecol Inc.'s groundwater monitoring data, I noted that the company is not following the environmental monitoring program required in their permit. It appears as if the company still samples their groundwater monitoring wells according to the groundwater monitoring program which they used in the past. The company is not complying with the following items required in their operating license:

1. Attachment 14, pg. 14-1, in Dynecol's Act 64 Operating License states that the company shall collect groundwater samples from four (4) monitoring wells, specifically B-2, B-3, B-4, and B-5. During the company's July, 1991 groundwater sampling, groundwater samples were collected from Wells B-1, B-2, B-3, and

B-5. Monitor Well B-1 is not part of the company's permitted groundwater monitoring program, yet this well was sampled and results were provided to the DNR. Monitor Well B-4 was not sampled during the July groundwater sampling and the company provided no explanation stating why it was not sampled. During the company's September, 1991 groundwater sampling, groundwater samples were collected from Monitor Wells B-3 and B-5. Again, the company provided no explanation as to why the other two wells in the monitoring program were not sampled.

2. Attachment 14, page 14-3, Section L-1f, of Dynecol's Act 64 Operating License states that the company shall collect quarterly samples from each of the company's four (4) groundwater monitoring wells and analyze them for the following parameters: aluminum, arsenic, barium, cadmium, chromium, lead, mercury, nickel, selenium, silver, zinc, pH, calcium, sodium, magnesium, potassium, sulfates, bicarbonate alkalinity, chloride, nitrate, and specific conductance. During groundwater samplings conducted in 1990 and 1991, the company did not analyze any groundwater samples for aluminum, barium, cadmium, selenium, silver, magnesium, potassium, or bicarbonate alkalinity.
3. Appendix 14, pg 14-4, of the company's operating license lists the method detection limits anticipated to be obtained during laboratory analysis for each of the required monitoring parameters. During the 1990 and 1991 groundwater samplings, laboratory detection levels for lead, chromium, and zinc were much too high. Laboratory detection levels for lead, chromium, and zinc in all monitoring wells sampled were in the range of 0.1 and 0.5 ppm rather than the anticipated limit of 0.05 ppm.
4. Appendix 14, page 14-5, of the company's operating license states that the company shall collect four (4) replicate samples from each monitoring well quarterly and analyze them for the parameters listed in Item #2 above. Laboratory results from this replicate sampling were to be used to develop a background data set for each of the site's four (4) groundwater monitoring wells. The background data set would then be used during subsequent groundwater samplings to statistically compare the facility's groundwater monitoring data. To my knowledge, the company has not provided groundwater

data from this replicate sampling to the DNR. The company needs to develop a good background data set in order to determine whether site operations are impacting the groundwater. Although the company has collected groundwater samples over the past several years from the four (4) designated groundwater monitoring wells, the results are questionable due to their wide variation, and in some cases, questionable values. The new background data set, to be collected under controlled QA/QC conditions specified in the company's operating license, is needed to alleviate this problem.

5. Appendix 14, Section L-1g(i), page 14-5, of Dynecol Inc.'s Operating License specifies that the company shall measure and report static water levels in each groundwater monitoring well sampled. The company's 1990 and 1991 groundwater monitoring reports did not document static water levels from any of the monitoring wells sampled.
6. Appendix 14, Section L-1g(viii), page 14-8, of the company's operating license states that the company will use customized field data entry forms each time a well is sampled. The 1990 and 1991 groundwater sampling reports which I have from the company did not contain any of these entry forms.
7. Appendix 14, Section L-1g(vii), page 14-7, of the company's operating license states that one (1) trip blank will be analyzed for the "primary monitoring parameters" on each sampling occasion. The 1990 and 1991 groundwater monitoring reports which I have do not contain laboratory data from these trip blanks.

The DNR needs to contact the company and advise them that they are not complying with the environmental monitoring requirements contained in their Act 64 operating license. The company needs to provide our office with a plan stating how they will address items #1 - #7 listed above.

Although the company's groundwater monitoring program does not conform to the requirements contained in their Act 64 Operating License, I did evaluate their July, 1991 and September, 1991 groundwater data for any obvious problems. Using the groundwater monitoring chart which I have attached as reference, it can be seen that the amounts of sodium, lead, and zinc reported in June/July 1991 in Monitor Well B-1 are much higher than previous levels in that well. Sodium,

January 9, 1992

lead, and zinc in Well B-1 were detected at levels of 1011 ppm, 67.4 ppm, and 0.660 ppm, respectively. Monitor Well B-1 is not part of the permitted groundwater monitoring program at the site and the well was not sampled during the next sampling in September 1991. Monitor Well B-1 was eliminated from the facility's groundwater monitoring program because it was suspected that the cement grout used to seal the well's annular space was contaminating samples collected from it. This problem was evidenced by extremely high pH levels in the well beginning in 1984. Although pH levels in Well B-1 increased in 1984 as a result of the cement grout problem, sodium, lead, and zinc levels remained relatively unchanged. Since this is the case, the company should determine why there was an increase in these parameters. The values for each of the parameters should be checked for error, and if none are noted, the well should be resampled if possible. Once this has been done, I would recommend that if Well B-1 has not been properly abandoned, that the company do so. If it is determined that monitoring should continue in the area where B-1 is located, a new well should be installed in its place.


Should you have any questions regarding this review, please contact me at 517-373-7974.

Attachment

cc/att: Ms. De Montgomery, DNR

cc: Ms. Cheryl Howe, DNR

HWP/C&E File

A handwritten signature in cursive script, reading "Eugene L. Loeble". The signature is written in dark ink and is positioned in the lower right quadrant of the page.

Dynecol Groundwater Monitor Wells  
Well B-1

Well Locations	pH	Sp. Cond	SO4	Cl	Na	NO3	Ca	Mg	Arsenic	Zn	Cr	Pb	Hg
Mg/l except pH & spec Cond. (umhos/cm)													
B-1													
07-27-82													
01-31-83													
07-22-83	6.75	3,000	<1.00	<1.00	237.86	<0.02	42.92	<0.100	<0.005	0.530	<0.006	<0.04	<0.005
02-28-84	6.80	3,630	242.60	1100.00	656.00	1.50	437.00	<0.010	<0.020	0.521	<0.010	<0.010	0.05
06-05-84													
Dynecol	6.60	3,870	708.60	780.00	347.90	2.95	486.70	0.085	0.020	0.039	0.023	<0.10	<0.01
DNR (1)	6.30	2,500	480.00	820.00	713.00		417.00	0.060	0.002	<0.050	<0.050	<0.050	<0.0005
DNR (2)	6.80	2,500	450.00	820.00	332.00		402.00	0.060	0.003	<0.050	<0.050	<0.050	<0.0005
10-08-84	11.00	2,630	140.00	675.00	330.00	0.22	105.80	0.091	0.001	0.052	<0.010	<0.010	<0.002
04-03-85	11.53	6,300	1094.00	438.80	738.10	0.14	581.20	<0.010	<0.100	0.014	<0.010	<0.010	<0.005
07-24-85 (DNR)	11.60	3,990	353.00	942.00	428.00		516.00	0.050	0.011	0.065	<0.050	<0.050	<0.0005
09-20-85	11.91	4,150	210.00	920.00	404.40	<0.10	42.13	<0.010	<0.10	0.060	0.013	<0.01	<0.05
01-10-86								<0.020	<0.100	0.012	<0.010	<0.050	<0.10
03-27-86	11.95	5,300	227.90	1053.00	391.80	<0.10	568.20	<0.020	0.361	0.070	0.010	0.100	0.150
07-03-86								0.014		0.094	0.012	0.282	
07-18-86	11.87	6,550	227.90	993.70	51.10	0.84	629.60	0.142	<0.10	0.084	0.010	<0.10	0.05
10-03-86	11.92	5,100	206.40	431.90	108.40	0.98	654.40	<0.020	<0.07	<0.005	<0.015	<0.075	<0.05
02-10-87	11.91	3,250	119.00	628.80	248.90	5.02	367.50	<0.020	0.10	0.072	<0.010	0.050	0.05
03-04-87	12.05	3,950	108.80	536.80	237.70	0.64	558.90	0.043	0.05	0.084	0.010	0.05	0.05
06-03-87	12.06	4,000	136.50	662.70	295.90	0.70	461.40	<0.050	<0.10	0.054	0.010	<0.10	<0.10
09-01-87	11.91	3,600	207.80	460.10	230.40	0.26	584.60	<0.050	<0.10	0.098	<0.010	<0.05	0.10
12-03-87	12.02	3,250	151.40	513.25	142.10	<0.01	503.50	0.100	0.25	0.083	<0.020	0.25	<0.25
03-03-88	11.82	3,700	67.55	816.85	379.60	0.33	427.10	<0.050	<0.10	0.091	0.010	<0.05	0.05
06-03-88													
09-08-88													
12-15-88													
03-02-89													
03-20-89													
06-07-89													
09-12-89													
12-12-89	11.40	5,000	63.00	470.00	<10.00	26.50	<5.00	<0.050	<0.005	<0.050	0.050	<0.05	<0.001
03-09-90	11.50	3,200	104.00	520.00	33.20	1.50	28.00	<0.500	0.300	<0.500	<0.500	<0.50	<0.010
06-18-90	7.70	1,400	41.00	60.00	70.30	<1.00	46.30	<0.50	0.050	0.643	0.500	<0.500	<0.010
09-10-90	10.89	2,100	2.10	424.00	246.00	1.40	381.00	0.100	<0.050	<0.100	<0.100	<0.100	0.010
03-17-91	11.47	4,700	100.00	950.00	300.00	<1.00			<0.050	<0.100	<0.100	0.100	<0.010
06-31-91	11.51	3,800	75.00	780.00	1011.00	1.50	9.18	0.100	<0.050	0.060	0.100	57.400	<0.010
09-09-91													

Dynecol Groundwater Monitor Wells  
Well B-2

Well Locations	pH	Sp. Cond	SO4	Cl	Na	NO3	Ca	Ni	Arsenic	Zn	Cr	Pb	Hg
Mg/l except pH & spec Cond. (umhos/cm)													
B-2													
07-27-82													
01-31-83													
07-22-83	6.55	3,000	<1.00	<1.00	298.23	0.40	29.25	<0.100	<0.005	0.300	<0.500	<0.04	<0.005
02-28-84	6.72	2,420	412.20	480.00	165.00	0.65	498.00	0.037	<0.020	1.404	<0.010	<0.010	<0.050
06-05-84													
Dynecol	6.50	4,200	818.00	850.00	270.10	3.05	649.70	0.048	<0.020	0.097	<0.010	<0.10	<0.01
DNR (1)	66.00	2,500	560.00	820.00	269.00		557.00	<0.050	0.001	0.120	<0.050	<0.05	<0.0005
DNR (2)													
10-08-84	7.09	1,980	568.40	196.60	116.30	0.23	267.00	0.021	<0.100	0.020	<0.010	<0.010	<0.050
04-03-85													
07-24-85 (DNR)													
09-20-85													
01-10-86													
02-27-86	7.44	1,590	238.20	170.10	128.30	<0.10	240.70	<0.020	0.210	0.041	<0.010	<0.100	0.067
07-03-86													
07-18-86													
10-03-86													
02-10-87													
03-04-87	7.20	1,950	749.50	149.30	125.80	0.13	413.40	0.063	<0.05	0.211	<0.01	<0.05	<0.05
06-03-87													
09-01-87													
12-03-87													
03-03-88													
06-03-88	7.67	1,100	64.38	87.48	68.00	1.64	169.10	<0.100	<0.250	0.220	0.059	<0.20	<0.250
09-08-88													
12-15-88													
03-02-89													
03-20-89													
06-07-89													
09-12-89													
12-12-89													
03-09-90													
06-18-90													
09-10-90													
03-17-91													
06-31-91	6.89	900	60.00	62.00	40.70	<1.00	158.00	<0.100	<0.050	0.160	<0.100	0.150	<0.010
09-09-91													



Dynecol Groundwater Monitor Wells  
Well B-3

Well Locations	pH	Sp. Cond	SD4	Cl	Na	NO3	Ca	Ni	Arsenic	Zn	Cr	Pb	Hg
Mg/l except pH & spec Cond. (umhos/cm)													
B-3													
07-27-82	7.25	2,240	340.00	370.00	130.00	<0.10	345.00	<0.020	<0.002	0.560	<0.100	<0.05	<0.005
01-31-83	6.90	1,400	272.34	980.90	331.20	0.10	101.80	<0.010	0.005	0.180	0.200	<0.05	<0.005
07-22-83	6.65	1,000	<1.00	<1.00	92.60	<0.10	11.56	<0.100	<0.005	0.370	0.650	<0.04	<0.005
02-28-84	7.04	826	180.40	129.00	75.57	0.40	133.00	<0.020	<0.020	1.317	0.399	<0.100	<0.050
06-05-84													
Dynecol	7.70	730	126.00	100.00	57.91	2.10	76.82	0.044	<0.020	0.188	<0.010	<0.100	<0.010
DNR (1)	8.40	700	79.00	96.00	53.20	0.01	54.80	<0.050	<0.001	<0.050	<0.050	<0.050	<0.0005
DNR (2)													
10-08-84	7.71	590	30.00	100.00	73.31	<0.10	32.97	<0.020	<0.001	0.026	<0.010	0.010	<0.002
04-03-85	8.15	565	67.60	77.24	48.76	0.38	41.49	<0.010	<0.100	0.935	<0.010	<0.010	<0.050
07-24-85 (DNR)	6.70	655	68.70	73.20	49.10	<0.01	47.00	<0.050	0.005	0.060	0.050	<0.050	<0.0005
09-20-85	7.87	530	72.00	72.00	48.73	<0.10	298.00	0.036	<0.100	0.072	<0.010	<0.01	<0.050
01-10-86								<0.020	<0.100	0.029	<0.010	<0.050	<0.100
03-27-86													
07-03-86													
07-18-86	7.70	720	66.14	73.24	315.80	0.03	62.98	0.060	<0.100	0.067	0.024	<0.10	<0.050
10-03-86	8.33	540	53.20	74.52	49.87	0.10	41.47	<0.020	<0.075	<0.005	0.015	0.075	<0.020
02-10-87	8.74	515	66.20	74.41	53.33	0.43	55.74	<0.020	<0.100	0.077	0.010	<0.05	<0.050
03-04-87	7.94	520	73.60	72.11	61.62	0.11	52.71	0.034	<0.050	0.104	0.010	0.05	<0.050
06-03-87	8.25	560	61.56	70.91	54.27	0.47	59.87	<0.050	<0.100	0.329	0.010	<0.10	<0.100
09-01-87	8.56	470	46.31	69.70	66.21	0.04	49.09	<0.050	<0.100	0.491	0.010	<0.05	<0.100
12-03-87	8.47	385	48.41	67.22	51.71	<0.10	54.09	<0.100	<0.250	0.100	0.250	<0.25	<0.250
03-03-88	8.25	395	45.54	87.34	41.28	0.28	43.74	<0.050	<0.100	0.118	0.010	0.05	<0.050
06-03-88	8.16	530	54.89	69.78	42.00	1.27	47.74	<0.100	<0.250	0.220	0.062	<0.20	<0.250
09-08-88	8.65	490	47.23	68.00	72.02	0.40	36.27	<0.100	0.053	0.205	0.010	0.10	<0.050
12-15-88	7.75	410	64.32	66.63	42.28	0.30	32.06	0.072	0.050	0.229	0.010	<0.05	<0.050
02-02-89	7.40	630	32.54	90.64	59.60	0.50	51.90	0.042	0.570	0.490	<0.010	0.110	<0.050
03-20-89		400							<0.010				
06-07-89	8.60	475	80.00	90.00	<100.00	16.00	32.60	0.040	0.020	0.500	0.013	0.020	<0.001
09-12-89	8.30	480	43.00	91.00	3.30	<1.00	15.00	<0.500	<0.010	<0.500	0.500	<0.500	0.005
12-12-89	8.90	300	34.00	60.00	<10.00	<1.00	<5.00	<0.050	<0.005	0.038	0.050	<0.050	<0.001
03-09-90	8.30	490	45.00	91.00	5.25	0.60	4.24	<0.500	0.120	0.500	<0.500	<0.500	<0.010
06-18-90	11.50	1,900	410.00	424.00	530.00	7.50	374.00	<0.500	<0.050	0.500	0.500	<0.500	<0.010
09-10-90	8.45	350	<1.00	91.00	52.00	<1.00	27.00	<0.100	<0.050	0.100	0.100	<0.100	<0.010
03-17-91	7.90	480	40.00	72.00	57.00	1.00			<0.050	<0.100	0.100	0.100	<0.010
06-31-91	7.55	600	50.00	90.00	49.00	<1.00	55.80	<0.100	<0.050	0.270	0.100	<0.100	0.010
09-09-91	7.86	400	50.00	76.00	72.00	<1.00	78.00	<0.100	<0.050	<0.100	0.100	0.100	<0.010

Dynecol Groundwater Monitor Wells  
Well B-4 (Installed in 1988)

Well Locations	pH	Sp. Cond	SO4	Cl	Na	NO3	Ca	Ni	Arsenic	Zn	Cr	Pb	Hg
<hr/>													
Mg/l except pH & spec Cond. (umhos/cm)													
B-4													
07-27-82													
01-31-83													
07-22-83													
02-28-84													
06-05-84													
Dynecol													
DNR (1)													
DNR (2)													
10-08-84													
04-03-85													
07-24-85 (DNR)													
09-20-85													
01-10-86													
03-27-86													
07-03-86													
07-18-86													
10-03-86													
02-10-87													
03-04-87													
06-03-87													
09-01-87													
12-03-87													
03-03-88													
06-03-88													
09-08-88													
12-15-88													
03-02-89													
03-20-89													
06-07-89	7.60	3,400	150.00	1200.00	<100.00	280.00	106.40	0.050	0.020	356.400	0.011	<0.02	<0.001
09-12-89	7.80	2,000	160.00	485.00	15.00	8.15	224.00	<0.500	<0.010	<0.500	<0.500	<0.500	0.001
12-12-89													
03-09-90	7.50	8,000	390.00	2300.00	258.00	1.00	32.70	<0.500	<0.050	<0.500	<0.500	<0.500	<0.010
06-18-90													
09-10-90													
03-17-91													
06-31-91													
09-09-91													

Dynecol Groundwater Monitor Wells  
Well B-5 (Installed in 1988)

Well Locations	pH	Sp. Cond	SO4	Cl	Na	NO3	Ca	Ni	Arsenic	Zn	Cr	Pb	Hg
-----													
Mg/l except													
pH & spec Cond.													
(umhos/cm)													
B-5													
07-27-82													
01-31-83													
07-22-83													
02-28-84													
06-05-84													
Dynecol													
DNR (1)													
DNR (2)													
10-08-84													
04-03-85													
07-24-85 (DNR)													
09-20-85													
01-10-86													
03-27-86													
07-03-86													
07-18-86													
10-03-86													
02-10-87													
03-04-87													
06-03-87													
09-01-87													
12-03-87													
03-03-88													
06-03-88													
09-08-88													
12-15-88	7.02	1,500	363.10	250.60	205.80	0.27	193.80	0.581	<0.050	0.581	0.037	0.091	0.119
03-02-89	7.20	2,400	331.40	414.00	324.00	0.78	230.00	0.037	0.450	0.480	<0.010	<0.050	<0.050
03-20-89													
06-07-89	7.80	4,700	390.00	1100.00	160.00	190.00	368.00	0.080	<0.010	<0.500	0.014	<0.020	<0.001
09-12-89	7.40	3,000	180.00	606.00	25.00	36.00	285.00	<0.500	<0.010	<0.500	<0.500	<0.500	0.002
12-12-89	7.70	2,000	1.10	530.00	<10.00	33.10	<5.00	<0.050	<0.005	0.144	<0.050	<0.050	<0.001
03-09-90	7.60	1,750	360.00	390.00	38.50	5.50	10.70	<0.500	<0.050	<0.500	<0.500	<0.500	<0.010
06-18-90	7.40	1,550	400.00	212.00	310.00	14.30	243.00	<0.500	<0.050	<0.500	<0.500	<0.500	<0.010
09-10-90	7.72	1,700	1.50	273.00	39.00	6.70	190.00	<0.100	<0.050	0.154	<0.100	<0.100	<0.010
03-17-91	6.63	2,600	80.00	773.00	330.00	2.20			<0.050	<0.100	<0.100	<0.100	<0.010
06-31-91	7.13	2,400	75.00	652.00	326.90	1.10	150.80	<0.100	<0.050	0.190	<0.100	<0.100	<0.010
09-09-91	7.26	2,100	80.00	588.00	290.00	<1.00	210.00	0.250	<0.050	0.250	<0.100	<0.100	<0.010

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John Engler

~~JAMES J. BLANCHARD~~, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING  
P.O. BOX 30028  
LANSING, MI 48909

Delbert Rector, Director

DAVID E. HALES, Director

May 22, 1991

Ms. Shari Kolak, 5HR-13  
Michigan Section  
RCRA Permitting Branch  
U.S. EPA - Region V  
230 South Dearborn Street  
Chicago, Illinois 60604

Dear Ms. Kolak:

SUBJECT: Dynecol, Inc., Detroit  
MID 074 259 565

As discussed during our telephone conversation of May 21, 1991, the tank excavation sampling plan submitted in response to the facility's hazardous and solid waste amendments permit has been reviewed. Several concerns were noted, and are reiterated here.

Due to the lack of U.S. EPA or MDNR staff presence during the tank excavations, there is no agency documented information on the quality of the tanks, or the soils with which they were associated. As you have indicated, the facility's sampling plan is inadequate relative to the number and type of samples proposed. To immediately jump to a "How Clean is Clean" (HCIC) level of sampling in the excavation, however, may be premature.

A representative sampling of the excavated soils that the facility has stockpiled is recommended. This material should indicate if contamination from the tanks has occurred. A copy of Waste Management Division's Sampling Strategies for Evaluating Waste Materials is attached as an example of an acceptable representative sampling approach. The data derived from the stockpiled material should be compared to background data developed from an unimpacted area on or near the site.

If the resultant data indicates that the material is statistically different from background, then a sampling of the excavation would be required. As this sampling would be of the pit floor and side walls, a HCIC approach would be warranted. The area to be gridded should include the side walls as well as the floor. Using the 90' x 45' base, with 12' side wall sketch submitted by the facility, the grid interval would be approximately 24', with a resultant 20 sampling points. Assuming that the original background samples were taken at the appropriate soil type and

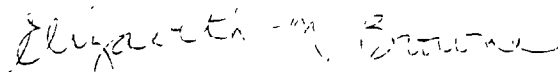
Ms. Shari Kolak  
Page 2  
May 22, 1991

depth, they should be acceptable for comparison to the excavation samples. Further excavation and/or sampling, if needed, would follow the procedures in HCIC.

In terms of sampling parameters, heavy metals and volatile organics are suggested. This is based on the facility's indications that inks and paints had been stored in the tanks. The metals should be those on RCRA's TCLP list, as well as copper and zinc, which are Michigan metals of concern. The organics would be those found in U.S. EPA's SW-846 scan 8010 for some of the solvents potentially associated with inks and paints. Methyl ethyl ketone and phenols are also potential contaminants. Finally, until the mid-1970's, PCBs were often associated with printer's ink. Depending on information available, an Aroclor scan may be advisable.

This concludes the comments based upon information received from Dynecol's submittals of April 29 and May 12, 1991. Please contact me at Waste Management Division, Department of Natural Resources, P.O. Box 30241, Lansing, Michigan, 48909, or at the telephone number below if you have questions concerning the contents of this letter.

Sincerely,



Elizabeth M. Browne  
Environmental Monitoring Coordinator  
Waste Management Division  
517-373-7974

Enclosure

cc: Ms. D. Montgomery ✓  
Ms. C. Howe  
Corrective Action File

De

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

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INTEROFFICE COMMUNICATION

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December 7, 1989

To: Cheryl Howe, HW Permits Unit, WMD

From: Liz Browne, Environmental Monitoring Coordinator *Liz*

Subject: Dynecol, Inc., Detroit, MI  
MID 074 259 565

Attached for your information and use are the pages that are to be incorporated as attachments to Dynecol's license. These items all relate to the facility's environmental monitoring program. Nadine Romero has provided you with the draft permit language to accompany this document. Two items of concern should be addressed prior to finalizing this set of attachments.

First, the ambient air monitoring program should have been reviewed and approved by Air Quality Division and the Wayne County Air Pollution Control staff. I have included this program as it appears in my copy of the application. It is from Revision 01, 06/30/89.

The second item involves the Sample Preservation and Analytical Procedures information. Table L.3, page L-14 contains two types of errors. The analytical method for sulfate is in error. The correct method is 426, not 407. Secondly, the columns for chloride, nitrate and sulfate are misaligned. It appears that the container information was omitted, and the other columns of information were shifted one space to the right. A new Table L.3 should be submitted for inclusion in the license. I have tagged the page in question in the attached package.

Other items were noted in the sampling and analysis plan, but none to the degree of concern to disrupt the current license time frame.

Please let me know if you have any questions about this memo or the attachments. Nadine and I can final the references in the environmental monitoring program in the body of the permit once the appropriate attachment numbers have been assigned.

cc: Ms. D. Montgomery ✓  
Ms. N. Romero  
Op. License File

Addendum to December 7, 1989 Memo from Browne to Howe  
re: Dynecol, Inc. Operating License Application

The December 5, 1989 response submitted by EDI has been reviewed in terms of the facility's environmental monitoring program. The changes indicated on my original memo still need to be addressed. Aluminum has been added to the list of primary monitoring parameters as was requested by Ms. Nadine Romero. The December 5 ambient air monitoring program should still be reviewed by appropriate staff prior to finalizing the attachments. No other significant changes to the section were made.

STATE OF MICHIGAN

NATURAL RESOURCES COMMISSION  
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JAMES J. BLANCHARD, Governor

**DEPARTMENT OF NATURAL RESOURCES**

GORDON E. GUYER, Director

**SOUTHEAST MICHIGAN FIELD OFFICE**

Waste Management Division

505 W. Main

Northville, MI 48167

March 31, 1988

Robert Pepin  
Dynecol, Inc.  
6520 Georgia St.  
Detroit, MI 48211

Re: MID 074259565

Dear Mr. Pepin:

On March 17, 1988, I conducted an inspection of the following permit requirements:

- A. Waste Analysis Plan and Waste Acceptance Procedures
  - B. Land Disposal Restriction Requirements
  - C. Groundwater Monitoring
- A. Dynecol, Inc.'s Waste Analysis Plan stipulates that a generator's waste characterization will be updated every 12 months. During the inspection, some waste characterizations noted were beyond 12 months old. Respond back that a file search has been made of current generators and that their respective waste characterizations are 12 months or less. All other aspects of the waste analysis plan were in compliance.
- B. Dynecol, Inc. must revise the waste analysis plan to account for acceptance procedures, etc., of California List Wastes. Dynecol must also begin requesting notification information from those generators sending a California restricted waste stream (i.e. D002 and metal-bearing streams that fit the Land Ban definitions). Enclosed are examples of notification forms used by others. You will probably need to tailor a notification form that fits Dynecol's needs.
- C. Dynecol is continuing with a hydro-geo evaluation. During the inspection a 60' well was being drilled and results were available from the other 20' wells that had been previously drilled. Nadine Romero has already provided Tien Pham with the correct standard deviation figures to be used in the future (another copy is enclosed). Based on the completion of the hydro-geo evaluation, Dynecol will be submitting a ground water assessment plan to Lansing for approval.

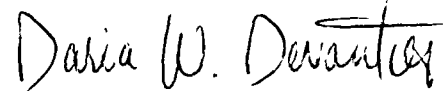


Page Two  
Dynecol, Inc.

Also noted was the fact that treatment tank #2 is back in service.

Respond to the issues and violations raised in this letter by April 30, 1988.  
If there are any questions, call me at 313/344-4670.

Sincerely,



Daria W. Devantier  
Environmental Quality Analyst

DWD:LHB  
cc: B. Okwumabua  
U. S. EPA

# DEPARTMENT OF NATURAL RESOURCES

HAZARDOUS WASTE DIVISION

FIELD REPORT

☐ Complaint Inspection  
☒ Compliance Inspection  
☐ PEAS Investigation  
☐ PCB Report/Complaint

☒ Act 64 \_\_\_\_\_  
☐ Act 136 \_\_\_\_\_  
☐ Act 245 \_\_\_\_\_  
☒ RCRA \_\_\_\_\_

Company/Facility		Date	Time
Dunecol, Inc.		3/17/88	
Act 64 Permit Review		Facility No.	
City		Staff	DW Devantier
Participants Tien Pham			
REMARKS:			
Waste Analysis Plan / Acceptance.			
Frequency - every 12 months per generator — some past 12 months.			
- process change by generator			
- waste doesn't match pre-audit			
Inspection of generator site — sales rep. does these inspections			
FOOB FOIG reviewed for cyanide — not receiving			
greater than 20 ppm not acceptable			
Available on-site - recent sample of waste stream } both on-site			
- waste characterization			
Inspection of every load			
- complied to retained sample ✓			
- odor compared " " ✓			
- pH compared " " ✓			
characterization ✓			
mainly looked at when generator is new ... lab personnel do get familiar with various streams			
Groundwater Monitoring			
- observed drilling crew ... not finding much water.			
- results to be sent to N. Romero in Lansing			
- other groundwater comp. issues from Sept inspection RTC 3/25/88			